Beloglottis, *Mesadenus*, *Pseudogoodyera*, *Brachystele*, *Schiedeella*, *Trachelosiphon*, *Deiregyne*, *Gamosepalum*, *Funkiella*, *Cladobium*, *Coccineorchis*, *Lyroglossa*, *Pteroglossa*, and *Centrogenium*.

STAPF[11] has established a new genus (*Daturicarpa*) of Apocynaceae from the Belgian Congo. It belongs to the Tabernaemontaneae, and includes three species of shrubs.—J. M. C.

Classification of symbiotic phenomena.—MCDOUGALL[12] has written a very sensible and stimulating article on symbiosis and its subdivisions. Very properly he disapproves of the numerous restricted definitions of the term, going back to the original definition of DEBARY, which happens also to be the only definition that justifies the retention of the word in the literature, and the only definition that is etymologically correct. It is one of the curiosities of biological science that so many writers have used the term symbiosis in the sense of mutualism, a relationship that does not exist; and even if it did exist we should not need two terms for the same relationship. The term is much needed, however, in the original and correct sense of "the living together of dissimilar organisms," as pointed out by MCDOUGALL, for there is no other term of such broad and general nature. The author's primary division of symbiosis is into disjunctive and conjunctive, each in turn being subdivided into social and nutritive; each type of nutritive symbiosis may be further subdivided into antagonistic and reciprocal. Plant communities illustrate social disjunctive symbiosis; lianas and epiphytes illustrate social conjunctive symbiosis. Antagonistic disjunctive symbiosis is illustrated by herbivores and plants; antagonistic conjunctive symbiosis is illustrated by the ordinary cases of parasitism, such as plant diseases, ectotrophic mycorhizas, etc. Reciprocal disjunctive symbiosis is illustrated by flowers and pollinating insects, reciprocal conjunctive symbiosis by cases of reciprocal parasitism, such as are seen in lichens, root tubercles, and endotrophic mycorhizas. MCDOUGALL condemns the curious view of some botanists that lichens are simply fungi. He asserts that it is just as absurd to call a fungus-alga combination a fungus as it would be to apply the term fungus to the mycorhizal combination of roots and fungi.—H. C. COWLES.

Forests of British Columbia,—WHITFORD and CRAIG have published an admirable volume on the forests of British Columbia, which are among the most interesting forests in existence.[13] The report is based on three years of

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[11] STAPF, O., *Daturicarpa*, a new genus of Apocynaceae. Kew Bull. no. 4. 166–171. *figs. 2.* 1921.

[12] MCDOUGALL, W. B., The classification of symbiotic phenomena. Plant World **21**:250–256. 1918.

[13] WHITFORD, H. N., and CRAIG., R. D., Forests of British Columbia. Rept. Comm. Conserv. Canada, Committee on Forests. pp. 409. *pls. 28. maps 21.* Ottawa. 1918.